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(FILE 'HOME' ENTERED AT 15:27:07 ON 19 APR 2005)

FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 15:27:29 ON 19 APR 2005

L1 266262 S PHOSPHOLIPID  
L2 247632 S VESICLE  
L3 558389 S T(1W) CELL  
L4 300354 S APOPTOSIS  
L5 27527 S L1 AND L2  
L6 29240 S L3 AND L4  
L7 21 S L5 (L) L6  
L8 12 DUP REM L7 (9 DUPLICATES REMOVED)

=> d 1-12 ti au py so

- L8 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Shed membrane microparticles from circulating and vascular cells in  
regulating vascular function  
AU Martinez, M. Carmen; Tesse, Angela; Zobairi, Fatiha; Andriantsitohaina,  
Ramaroson  
PY 2005  
SO American Journal of Physiology (2005), 288(3, Pt. 2), H1004-H1009  
CODEN: AJPHAP; ISSN: 0002-9513
- L8 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1  
TI Gene expression profiles and biomarkers for the detection of  
hyperlipidemia and other disease-related gene transcripts in blood  
IN Liew, Choong-Chin  
PY 2004  
2004  
2004  
2004  
2004  
2004  
2004  
SO U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S. Ser. No. 802,875.  
CODEN: USXXCO
- L8 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2  
TI Sequences of human schizophrenia related genes and use for diagnosis,  
prognosis and therapy  
IN Liew, Choong-chin  
PY 2004  
2004  
2004  
2004  
2004  
SO U.S. Pat. Appl. Publ., 156 pp., Cont.-in-part of U.S. Ser. No. 802,875.  
CODEN: USXXCO
- L8 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
TI DNA microarray analysis of gene expression in the diagnosis of estrogen  
receptor positive- and negative-breast cancer  
IN Erlander, Mark G.; Ma, Xiao-Jun; Wang, Wei; Wittliff, James L.  
PY 2004  
2004  
SO PCT Int. Appl., 226 pp.  
CODEN: PIXXD2
- L8 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Inflammation-associated genes and proteins for assessing transplant  
recipient's risk of delayed graft function, graft rejection and long-term  
prognosis  
IN Strom, Terry B.; Libermann, Towia; Schachter, Asher  
PY 2004  
2005  
SO PCT Int. Appl., 52 pp.  
CODEN: PIXXD2
- L8 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Methods of treating transplants with engineered T-cell  
-apoptosis-inducing fusogenic vesicles to prevent  
immunorejection  
IN Francois, Cedric  
PY 2004  
2004  
SO PCT Int. Appl., 99 pp..  
CODEN: PIXXD2
- L8 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Human tissue-specific housekeeping genes identified by expression

profiling  
IN Aburatani, Hiroyuki; Yamamoto, Shogo  
PY 2004  
2004  
SO PCT Int. Appl., 372 pp.  
CODEN: PIXXD2

L8 ANSWER 8 OF 12 MEDLINE on STN DUPLICATE 3  
TI Interactions of histone H1 with **phospholipids** and comparison of  
its binding to giant liposomes and human leukemic T  
cells.  
AU Zhao Hongxia; Bose Shambhunath; Tuominen Esa K J; Kinnunen Paavo K J  
PY 2004  
SO Biochemistry, (2004 Aug 10) 43 (31) 10192-202.  
Journal code: 0370623. ISSN: 0006-2960.

L8 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
TI CD95 death-inducing signaling complex formation and internalization occur  
in lipid rafts of type I and type II cells  
AU Eramo, Adriana; Sargiacomo, Massimo; Ricci-Vitiani, Lucia; Todaro,  
Matilde; Stassi, Giorgio; Messina, Carlo G. M.; Parolini, Isabella; Lotti,  
Fiorenza; Sette, Giovanni; Peschle, Cesare; De Maria, Ruggero  
PY 2004  
SO European Journal of Immunology (2004), 34(7), 1930-1940  
CODEN: EJIMAF; ISSN: 0014-2980

L8 ANSWER 10 OF 12 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on  
STN  
TI Phosphatidylserine on human immunodeficiency virus (HIV) envelope is a  
cofactor for infection of macrophages.  
AU Henderson, Andrew James [Reprint author]; Callahan, Mellisa K. [Reprint  
author]; Truong, Linh T. [Reprint author]; Schlegel, Robert A. [Reprint  
author]  
PY 2001  
SO FASEB Journal, (March 8, 2001) Vol. 15, No. 5, pp. A1010. print.  
Meeting Info.: Annual Meeting of the Federation of American Societies for  
Experimental Biology on Experimental Biology 2001. Orlando, Florida, USA.  
March 31-April 04, 2001.  
CODEN: FAJOEC. ISSN: 0892-6638.

L8 ANSWER 11 OF 12 MEDLINE on STN DUPLICATE 4  
TI A conformational change in cytochrome c of apoptotic and necrotic cells is  
detected by monoclonal antibody binding and mimicked by association of the  
native antigen with synthetic **phospholipid vesicles**.  
AU Jemmerson R; Liu J; Hausauer D; Lam K P; Mondino A; Nelson R D  
PY 1999  
SO Biochemistry, (1999 Mar 23) 38 (12) 3599-609.  
Journal code: 0370623. ISSN: 0006-2960.

L8 ANSWER 12 OF 12 MEDLINE on STN DUPLICATE 5  
TI CD95 (Fas/APO-1) induces an increased phosphatidylserine synthesis that  
precedes its externalization during programmed cell death.  
AU Aussel C; Pelassy C; Breittmayer J P  
PY 1998  
SO FEBS letters, (1998 Jul 17) 431 (2) 195-9.  
Journal code: 0155157. ISSN: 0014-5793.

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L8 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
AB . . . lymphocytes, and vascular cells, endothelial cells, and smooth  
muscle cells. When they are activated by an agonist, shear stress, or  
**apoptosis**, these cells release **vesicles** shed from the  
blebbing plasma membrane called microparticles. Microparticles harbor  
cell surface proteins and contain cytoplasmic components of the original  
cell. They exhibit neg. charged **phospholipids**, chiefly  
phosphatidylserine, at their surface, which accounts for their

procoagulant character and proinflammatory properties, including alteration of vascular function. Elevated. . . particular, it summarizes the signaling cascades involved in microparticle-induced vascular dysfunction with special attention to the cellular origin of these **vesicles** (platelet, endothelial, and leukocytic), which may explain their differential consequences on vascular remodeling. The available information provides a rationale for. . .

ST review **phospholipid** membrane microparticle vascular cell signaling circulation

IT **Phospholipids**, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(role of **phospholipids** from shed membrane microparticles  
vascular cells in regulating vascular function)

IT B cell (lymphocyte)

Cell activation

Cell membrane

Circulation

Platelet (blood)

**T cell** (lymphocyte)

(shed membrane microparticles from circulating and vascular cells in  
regulating vascular function)

L8 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1

IT Proteins

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL  
(Biological study); USES (Uses)  
(APR-3 (**apoptosis**-related protein-3); gene expression  
profiles and biomarkers for the detection of hyperlipidemia and other  
disease-related gene transcripts in blood)

IT Proteins

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL  
(Biological study); USES (Uses)  
(SEC22L3 (SEC22 **vesicle** trafficking protein-like 3); gene  
expression profiles and biomarkers for the detection of hyperlipidemia  
and other disease-related gene transcripts in blood)

IT Proteins

RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL  
(Biological study); USES (Uses)  
(**phospholipid**-exchanging; gene expression profiles and  
biomarkers for the detection of hyperlipidemia and other  
disease-related gene transcripts in blood)

IT 130301-44-9, DNA (human endogenous retrovirus clone LC14 5'-LTR (long  
terminal repeat)) 134946-17-1 136957-46-5 139802-67-8, GenBank  
X12966 139802-69-0, GenBank M21898 139803-45-5, GenBank X14174  
139803-69-3 139803-97-7, DNA (human clone 2A1 Blast-1 cDNA)  
139804-98-1, GenBank X05895 139805-78-0 139806-18-1, GenBank X07854  
139806-49-8, GenBank M13701 139806-78-3, GenBank M20675 139806-85-2  
139807-09-3, GenBank M13555 139807-73-1 139808-55-2 139808-94-9,  
GenBank X03339 139809-01-1, DNA (human gene HLA-DQB1 cDNA)  
139809-51-1, DNA (human NCA-W272 cDNA) 139809-53-3, DNA (human cell line  
HL60 gene NCF1) 139809-68-0 139809-84-0 139810-28-9, DNA (human gene  
KLK3 cDNA) 139810-69-8 139810-73-4, DNA (human gene RALB cDNA)  
139810-75-6 139811-16-8, GenBank M14387 139811-56-6 139811-59-9, DNA  
(human gene SYB1) 139812-30-9 139812-53-6, DNA (human) 139812-56-9  
139812-59-2 139812-78-5 139838-04-3 139841-90-0 139847-27-1, DNA  
(mouse strain C3H) 139848-13-8 139848-14-9 139860-42-7 139863-37-9  
139865-29-5 139866-88-9 139868-18-1 139868-52-3, GenBank X13312  
140026-52-4 140026-68-2, GenBank M14362 140026-92-2, DNA (human gene  
GLB1 cDNA) 140027-02-7 140027-35-6 140027-49-2, DNA (human clone  
pm5.1 gene MCP cDNA) 140028-07-5, DNA (human gene COX5B) 140028-68-8  
140028-95-1 140029-15-8, DNA (human gene EVI2A) 140029-24-9  
140029-44-3, DNA (human gene G6PD) 140029-64-7 140029-91-0  
140029-98-7, DNA (human gene GNB2) 140030-00-8, GenBank M34480  
140030-37-1, GenBank J00176 140030-40-6 140031-49-8 140031-62-5  
140031-82-9, GenBank M35718 140032-11-7 140032-23-1, DNA (human gene  
LSP1) 140032-84-4, GenBank M21533 140033-65-4, GenBank M33883  
140033-75-6 140033-92-7 140035-52-5, DNA (human gene STS)  
140035-85-4 140036-17-5 140047-03-6 140050-16-4, DNA (human gene

PIM1 cDNA) 140050-18-6, DNA (human gene ELN cDNA) 140062-81-3, GenBank  
 M60830 140065-89-0, DNA (human gene TRPM-2 plus flanks) 140068-41-3  
 140072-54-4, GenBank X51346 140072-79-3 140077-71-0 140078-05-3  
 140078-16-6 140078-86-0, GenBank X15875 140078-97-3 140079-37-4, DNA  
 (human clone lambda HtV8.) 140086-88-0 140093-06-7 140093-41-0  
 140095-94-9, DNA (human gene PML cDNA) 140095-95-0 140103-00-0  
 140106-51-0, DNA (human grancalcin cDNA plus flanks) 140274-68-6  
 140275-45-2 140275-72-5, DNA (human cell surface antigen B1 gene)  
 140275-82-7, GenBank M16411 140276-13-7, DNA (human T-47D  
 cell calcyclin cDNA plus flanks) 140276-30-8 140277-10-7  
 140277-53-8, DNA (human gene DEF1 cDNA) 140277-56-1, DNA (human gene  
 DIA1 cDNA) 140277-65-2 140277-85-6, GenBank X02598 140278-79-1  
 140278-80-4 140279-05-6, GenBank M20597 140279-11-4 140279-23-8,  
 GenBank M21139 140279-35-2 140279-58-9, GenBank J03238 140279-83-0,  
 DNA (human gene GJA1P1 cDNA) 140281-11-4, DNA (human gene IGHM cDNA)  
 140281-24-9, GenBank M12378 140281-74-9, DNA (human gene IL2RB cDNA)  
 140282-45-7, DNA (human gene CLTA cDNA) 140283-56-3, GenBank M23907  
 140284-71-5, DNA (human gene PEPD cDNA) 140284-75-9 140286-07-3  
 140286-56-2 140286-62-0 140286-70-0, DNA (human gene SPARC)  
 140287-32-7, GenBank X04145 140287-34-9, DNA (human T3 delta protein  
 gene) 140288-27-3, GenBank K00529 140316-52-5 140317-14-2  
 140318-05-4, DNA (human gene MCC cDNA) 140318-48-5, GenBank M60779  
 140318-97-4 140325-18-4, DNA (human alpha-2-globin gene) 140327-31-7,  
 DNA (human gene MGSA plus flanks) 140333-26-2 140333-51-3, GenBank  
 X51804 140335-59-7, DNA (human gene NKG5 cDNA) 140341-46-4  
 140344-53-2 140345-79-5 140347-28-0, DNA (human clone DSzap10 protein  
 P 1 cDNA plus flanks) 140348-27-2 140359-50-8 140506-95-2, GenBank  
 M18232 140507-87-5, DNA (human clone pHGC3K5) 140508-25-4  
 140508-50-5, GenBank M14193 140509-55-3, DNA (human gene HLA-B)  
 140512-00-1, DNA (human gene HLA-A) 140512-55-6, GenBank M23903  
 140513-95-7, DNA (human gene SNRPB cDNA) 140515-62-4, GenBank X02964  
 140515-65-7 140516-15-0 140549-29-7, DNA (human clone pSK 111 gene  
 proto-vav) 140550-06-7, DNA (human gene TF12 cDNA) 140552-04-1, DNA  
 (human gene trk4 cDNA) 140554-10-5 140555-42-6, DNA (human hemoglobin  
 alpha chain cDNA) 140559-41-7, DNA (human clone pHPC3 gene COMT cDNA)  
 140560-56-1 140561-07-5 140590-87-0 140599-70-8 140742-94-5, DNA  
 (human cell line KG-1 gene fur cDNA) 140743-09-5, DNA (human liver  
 glucosylceramidase gene plus flanks) 140743-32-4, GenBank M20589  
 140743-93-7 140745-78-4 140746-14-1 140746-49-2 140746-50-5  
 140747-22-4 140748-66-9, GenBank M34667 140751-12-8, DNA (human  
 $\beta$ 5-tubulin gene plus flanks) 140752-04-1 140752-66-5  
 140790-94-9 140804-56-4 140807-00-7, DNA (human gene TAN-1 protein  
 cDNA) 140817-78-3 140817-86-3 140824-54-0 140828-34-8, DNA (human  
 gene IGHV $\epsilon$ ) 140957-37-5, DNA (human H<sup>+</sup>,K<sup>+</sup>-ATPase gene) 140958-50-5,  
 GenBank M59164 140958-66-3, GenBank X14298 140961-24-6 140961-63-3  
 140982-71-4 140983-57-9, DNA (human gene NAGA) 140989-24-8, DNA (human  
 cell line B-CLL cells) 140996-43-6, DNA (human calpactin 1 light chain  
 cDNA plus flanks) 140997-63-3 140999-46-8, DNA (human gene SM22 cDNA)  
 140999-53-7 141004-42-4, DNA (human ribosome protein S 3a cDNA plus  
 flanks) 141004-88-8, DNA (human clone M117S cDNA) 141005-73-4, GenBank  
 M90352 141158-18-1, DNA (human interferon  $\alpha/\beta$  receptor gene  
 plus flanks) 141162-36-9 141163-69-1 141163-75-9 141165-62-0,  
 GenBank M90746 141166-37-2 141705-28-4 141877-59-0, GenBank M84646  
 141878-66-2 142099-74-9, DNA (human gene ZNF76) 142432-36-8  
 142480-16-8, DNA (human gene HLA-92) 142693-02-5 142694-31-3, DNA  
 (human antigen HLA-Cw 8.1 cDNA) 142788-99-6 142862-78-0, DNA (human  
 clone C37 connectin fragment-specifying) 142883-23-6, DNA (human gene  
 ETS2) 142883-26-9 142915-11-5 143003-34-3 143342-03-4  
 144014-64-2 144384-79-2, DNA (chicken gene c-src cDNA) 144531-46-4  
 144560-20-3, DNA (human gene N2 cDNA) 144560-26-9 144560-31-6  
 144725-54-2, DNA (human L-plastin gene) 144755-39-5 144805-20-9  
 144805-24-3 144869-18-1, GenBank S57803 145280-67-7, DNA (human  
 nucleobindin cDNA) 145281-53-4, DNA (human gene IGHV $\epsilon$ ) 145619-37-0  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)

(nucleotide sequence; gene expression profiles and biomarkers for the  
 detection of hyperlipidemia and other disease-related gene transcripts  
 in blood)

L8 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

IT Synaptobrevins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (1, **vesicle**-associated membrane protein 1; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Synaptobrevins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (2, **vesicle**-associated membrane protein 2; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (APR-3 (**apoptosis** related protein 3); sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (**BRAP1** (**breast** cancer associated protein); sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (**BUB3**, **kinetochore**; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (**BUP**; **sequences** of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (**Bcl-2**, -like 2; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (CASP8 (FADD-like **apoptosis** regulator); sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (FADD (Fas-associated death domain protein), -like **apoptosis** regulator; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (FADD (Fas-associated death domain protein), FADD-like **apoptosis** regulator; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (NF-ATc nuclear factor activated **T-cells** cytoplasmic calcineurin-dependent 1; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

therapy)

IT Transcription factors  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (NFAT4 (nuclear factor of activated **T-cell**, 4); sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (**T-cell** differentiation protein MAL; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (death effector filament-forming Ced-4-like **apoptosis**; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT TCR (**T cell** receptors)  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (interacting mol.; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (linker for activation **T cell**; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (mature **T-cell** proliferation 1; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (nuclear factor activated **T-cells** cytoplasmic calcineurin-dependent 3; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

IT Transport proteins  
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); BIOL (Biological study); USES (Uses)  
 (**phospholipid** scramblase 3; sequences of human schizophrenia-related genes and use for diagnosis, prognosis and therapy)

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IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (NFAT (nuclear factor of activated **T-cell**), NFAT5, gene for, in diagnosis of breast cancer; DNA microarray anal. of gene expression in diagnosis of estrogen receptor pos.- and neg.-breast cancer)

IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (NFAT2 (nuclear factor of activated **T-cell**, 2), NFATC4, gene for, in diagnosis of breast cancer; DNA microarray anal. of gene expression in diagnosis of estrogen receptor pos.- and neg.-breast cancer)

IT Transport proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (VMAT1 (**vesicle** monoamine transporter 1), gene for, in diagnosis of breast cancer; DNA microarray anal. of gene expression in diagnosis of estrogen receptor pos.- and neg.-breast cancer)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)

(**apoptosis** related protein APR-3, gene for, in diagnosis of breast cancer; DNA microarray anal. of gene expression in diagnosis of estrogen receptor pos.- and neg.-breast cancer)

IT Transport proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**phospholipid** transporter, gene for, in diagnosis of breast cancer; DNA microarray anal. of gene expression in diagnosis of estrogen receptor pos.- and neg.-breast cancer)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(**vesicle** trafficking protein, gene for, in diagnosis of breast cancer; DNA microarray anal. of gene expression in diagnosis of estrogen receptor pos.- and neg.-breast cancer)

L8 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AB . . . race). The genes that can be assessed include those encoding agents that mediate inflammation, immune activation, and cell death or **apoptosis** (we may refer to these genes below as "inflammatory", "immune" or "cytoprotective"). Surprisingly, we found that the levels of gene. . .

ST inflammation immune activation **apoptosis** gene protein transplant rejection prognosis

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(ARC (**apoptosis** repressor with caspase recruitment domain); inflammation-associated genes and proteins for assessing transplant recipient's risk of delayed graft function, graft rejection and long-term prognosis)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(DP (docking protein), pll5 **vesicle**; inflammation-associated genes and proteins for assessing transplant recipient's risk of delayed graft function, graft rejection and long-term prognosis)

IT Proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(IAP (inhibitor of **apoptosis** proteins); inflammation-associated genes and proteins for assessing transplant recipient's risk of delayed graft function, graft rejection and long-term prognosis)

IT **T cell** (lymphocyte)

(activated; inflammation-associated genes and proteins for assessing transplant recipient's risk of delayed graft function, graft rejection and long-term prognosis)

IT Animal cell

Animal tissue

**Apoptosis**

Body fluid

Cell differentiation

Cytoprotective agents

Digestive tract

Epithelium

Genetic markers

Human

Immunosuppressants

Inflammation

Lymphocyte

Neuroglia

Pancreatic islet of Langerhans

Prognosis

Stem cell

Stress, biological

Susceptibility (genetic)

Transplant and Transplantation

Transplant rejection

Yeast

(inflammation-associated genes and proteins for assessing transplant

recipient's risk of delayed graft function, graft rejection and long-term prognosis)

IT Transport proteins

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(**phospholipid** transporter; inflammation-associated genes and proteins for assessing transplant recipient's risk of delayed graft function, graft rejection and long-term prognosis)

IT Antigens

RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(tumor-associated, cutaneous **T cell** lymphoma-associated tumor antigen se20-4; inflammation-associated genes and proteins for assessing transplant recipient's risk of delayed graft function, graft rejection and long-term prognosis)

IT 9000-88-8, D-Amino acid oxidase 9001-41-6, Glucose phosphate isomerase  
9001-50-7, Glyceraldehyde-3-phosphate dehydrogenase 9001-52-9  
9001-62-1, Lipase A 9012-37-7, Aminoacylase 1 9013-18-7 9014-19-1,  
Pyruvate carboxylase 9014-20-4, Pyruvate dehydrogenase 9014-48-6,  
Transketolase 9015-67-2, Alanine-glyoxylate aminotransferase  
9015-88-7, Serine hydrolase 9023-09-0, Sulfotransferase 9023-44-3,  
Tryptophanyl-tRNA synthetase 9023-58-9, Argininosuccinate synthetase  
9023-69-2, Asparagine synthetase 9025-54-1, S-Adenosylhomocysteine  
hydrolase 9025-73-4, Phosphoserine phosphatase 9026-00-0, Cholesterol  
esterase 9026-04-4, Thiosulfate sulfurtransferase 9026-05-5,  
Mercaptopyruvate sulfurtransferase 9027-13-8, Enoyl coenzyme A hydratase  
9027-27-4,  $\beta$  Ureidopropionase 9027-65-0, Acyl-CoA dehydrogenase  
9027-95-6, ATP citrate lyase 9028-04-0, NADH-coenzyme Q reductase  
9028-21-1, Sorbitol dehydrogenase 9029-22-5, Sarcosine oxidase  
9029-61-2, Kynurenine 3-monooxygenase 9029-72-5, 4-Hydroxyphenylpyruvate  
dioxygenase 9029-73-6, Phenylalanine hydroxylase 9029-74-7,  
Nicotinamide N-methyltransferase 9029-78-1, Betaine-homocysteine  
methyltransferase 9029-95-2, Glycine-N-acyltransferase 9030-50-6,  
Ketohehexokinase 9030-87-9, 15-Hydroxyprostaglandin dehydrogenase  
9032-05-7, Formiminotransferase cyclodeaminase 9032-83-1,  
Formiminotransferase cyclodeaminase 9033-23-2 9033-27-6 9035-51-2,  
Cytochrome P 450, biological studies 9042-64-2, Dopa decarboxylase  
9059-11-4, Amine oxidase 9074-01-5, Pyruvate dehydrogenase kinase  
9082-73-9D, Steroid dehydrogenase, homologs 11016-39-0, Properdin  
37255-38-2, Glutaryl-coenzyme A dehydrogenase 37256-73-8, Flavin-containing  
monooxygenase 1 37277-74-0, Quinolate phosphoribosyltransferase  
39279-34-0 39434-01-0, Nucleotide phosphodiesterase 52660-18-1, Casein  
kinase 1 55467-59-9, Chitinase, diacetyl- 62031-54-3, Fibroblast  
growth factor 65997-74-2, Cathepsin F 70712-46-8, Type I deiodinase  
75302-32-8, Dolichyldiphosphoryl oligosaccharide-protein  
glycosyltransferase 77106-95-7, Carbonyl reductase 77271-19-3,  
O-6-Methylguanidine-DNA methyltransferase 77642-24-1D, Thymosin  $\beta$ 4,  
analogs 78689-77-7, 6-Phosphofructo-2-kinase 78990-62-2, Calpain  
79079-11-1, Calpastatin 79747-53-8, Protein tyrosine phosphatase  
80619-02-9, Arachidonate 5-lipoxygenase 81611-75-8, Fructose-2,6-  
diphosphatase 82249-72-7, EIF-2 $\alpha$  kinase 82707-54-8, Membrane  
metallo-endopeptidase 87397-91-9, Thymosin  $\beta$ 10 90119-11-2,  
Leukotriene B4  $\omega$  hydroxylase 97089-82-2, 6-  
Pyruvoyltetrahydropterin synthase 99194-04-4, Cystatin B 127464-60-2,  
Vascular endothelial growth factor 134712-57-5, Sterol 27-hydroxylase  
138674-34-7, Cysteine proteinase inhibitor 139691-92-2, Serine  
proteinase inhibitor 140208-24-8 141436-78-4, Protein kinase C  
145809-21-8, Tissue inhibitor of metalloproteinase 3 152478-56-3, Janus  
kinase 1 169592-62-5, Cyclin-dependent kinase 10 172308-13-3,  
Mitogen-activated protein kinase kinase 3 185402-46-4, Phytanoyl-CoA  
hydroxylase 186270-49-5, Angiopoietin-1 192588-76-4, CASP8 and  
FADD-like **apoptosis** regulator 241475-96-7, Suppression of  
tumorigenicity 14 252901-98-7, Tousled-like kinase 1 292850-69-2,  
Nardilysin 301167-76-0, Protein tyrosine phosphatase IVA2 362479-32-1,  
Protein phosphatase 1 644990-68-1, Peroxiredoxin 4  
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic  
use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(inflammation-associated genes and proteins for assessing transplant

recipient's risk of delayed graft function, graft rejection and long-term prognosis)

L8 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Methods of treating transplants with engineered **T-cell**  
**-apoptosis**-inducing fusogenic **vesicles** to prevent immunorejection  
AB The invention provides methods protecting transplants from immunorejection by administering to the transplant a **T cell-apoptosis**-inducing mol. and a **phospholipid** which is a stable **vesicle** former. Without harming or pre-treating the recipient, the endothelium of an allograft are coated with a protective veil consisting of selected exogenous mols. Engineered highly fusogenic **vesicles** (FUVs) quickly incorporate into cell membranes, the lipids of which are modified to include specific mols. that act as tethers. . . the extracellular domains of single-pass transmembrane polypeptides to the lipids of cell membranes, prevents the rapid internalization of the polypeptides. **T-cell-apoptosis**-inducing mol., such as FasL, are tethered to the endothelial membranes of the transplant, lying in wait for the unwary **T cell**. FasL specifically binds Fas receptors on **T cells**, triggering the death of the cell before the cell has the opportunity to damage the transplant. The invention allows for. . .  
ST transplant pretreatment engineered **T cell**  
**apoptosis** inducing fusogenic **vesicle**; immunorejection transplant prevention FasL fusion protein fusogenic **vesicle** treatment; **phospholipid** polar lipid FUV **T cell**  
**apoptosis** induction transplant  
IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(FUV consisting of; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Hypoxia, animal  
(FUV protects isolated heart from; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Fusion proteins (chimeric proteins)  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**T-cell-apoptosis**-inducing mol. fusion with avidin or streptavidin; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Lipids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**T-cell-apoptosis**-inducing mols. comprising; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Protein motifs  
(biotin-binding domain, FasL fusion,with; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Drug delivery systems  
(biotinylated **phospholipid**; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Immunosuppression  
(elimination therapy using; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Transplant and Transplantation  
(endothelium, coating; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)  
IT Transplant and Transplantation

(former, FUV consisting of; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Fas ligand

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fusion products, FUV comprises **T-cell-apoptosis**-inducing; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Avidins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fusion with **T-cell-apoptosis**-inducing mols.; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Transplant and Transplantation

(heart; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT **T cell** (lymphocyte)

(induced **apoptosis**; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT **Apoptosis**

(induced, of **T-cells**; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Drug delivery systems

(liposomes, FUVs, highly fusogenic **vesicles**; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Endothelium

(of allograft, coated with protective veil; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Fas antigen

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(on **T cells**, **T-cell-apoptosis** via binding with FasL-comprising FUV; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Lipids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(polar, FUV consisting of; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Transplant rejection

(prevention; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Transplant and Transplantation

(skin; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT **Phospholipids**, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stable **vesicle** former, FUV comprising; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT Heart

Skin

(transplant; methods of treating transplants with engineered **T**

-**cell-apoptosis**-inducing fusogenic **vesicles**  
(FUVs) to prevent immunorejection)

IT 56-65-5, ATP, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(FUV comprises, for maintaining transplant viability; methods of  
treating transplants with engineered **T-cell-**  
**apoptosis**-inducing fusogenic **vesicles** (FUVs) to  
prevent immunorejection)

IT 25322-68-3, PEG  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(FUV consisting of; methods of treating transplants with engineered  
**T-cell-apoptosis**-inducing fusogenic  
**vesicles** (FUVs) to prevent immunorejection)

IT 58-85-5, Biotin  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**T-cell-apoptosis**-inducing mols.  
comprising; methods of treating transplants with engineered **T**  
**-cell-apoptosis**-inducing fusogenic **vesicles**  
(FUVs) to prevent immunorejection)

IT 120201-96-9  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(as lipid moiety, **T-cell-apoptosis**  
-inducing mols. comprising; methods of treating transplants with  
engineered **T-cell-apoptosis**-inducing  
fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT 4004-05-1 17364-16-8 60562-16-5 70614-14-1 169437-35-8  
474945-24-9 704911-72-8  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(as polar lipid of FUV; methods of treating transplants with engineered  
**T-cell-apoptosis**-inducing fusogenic  
**vesicles** (FUVs) to prevent immunorejection)

IT 4235-95-4 59403-54-2, 1-Palmitoyl-2-docosaheptaenoyl-sn-glycero-3-  
phosphocholine  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(as stable **vesicle** former **phospholipid**; methods of  
treating transplants with engineered **T-cell-**  
**apoptosis**-inducing fusogenic **vesicles** (FUVs) to  
prevent immunorejection)

IT 9013-20-1, Streptavidin  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fusion with **T-cell-apoptosis**-inducing  
mols.; methods of treating transplants with engineered **T-**  
**cell-apoptosis**-inducing fusogenic **vesicles**  
(FUVs) to prevent immunorejection)

IT 139832-29-4, GenBank X05343 142456-59-5, GenBank X65082 391555-63-8,  
GenBank U11821  
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
(Biological study)  
(methods of treating transplants with engineered **T-**  
**cell-apoptosis**-inducing fusogenic **vesicles**  
to prevent immunorejection)

IT 706878-61-7 706878-63-9 706878-65-1  
RL: PRP (Properties)  
(unclaimed nucleotide sequence; methods of treating transplants with  
engineered **T-cell-apoptosis**-inducing  
fusogenic **vesicles** to prevent immunorejection)

IT 706878-62-8 706878-64-0 706878-66-2 706878-67-3  
RL: PRP (Properties)  
(unclaimed protein sequence; methods of treating transplants with  
engineered **T-cell-apoptosis**-inducing  
fusogenic **vesicles** to prevent immunorejection)

L8 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN  
IT Protamines  
Synaptobrevins  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(1; human tissue-specific housekeeping genes identified by  
expression profiling)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (2B, **KIAA0735**; human **tissue-specific** housekeeping  
 genes identified by expression profiling)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (CRTAM (class I MHC-restricted **T cell**-associated  
 mol.); human **tissue-specific** housekeeping genes identified by  
 expression profiling)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (**DKFZP586J1624**; human **tissue-specific** housekeeping  
 genes identified by expression profiling)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (IAP (inhibitor of **apoptosis** proteins); human **tissue-specific**  
 housekeeping genes identified by expression profiling)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (LAT (linker for activation of **T cells**); human  
**tissue-specific** housekeeping genes identified by expression profiling)

IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (NFAT4 (nuclear factor of activated **T-cell**, 4);  
 human **tissue-specific** housekeeping genes identified by expression  
 profiling)

IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (TCF7 (**T-cell** specific, HMG-box); human  
**tissue-specific** housekeeping genes identified by expression profiling)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (TCF7L2 (transcription factor 7-like 2 (**T-cell**  
 specific, HMG-box)); human **tissue-specific** housekeeping genes  
 identified by expression profiling)

IT TCR (**T cell** receptors)  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (TRIM (**T-cell** receptor interacting mol.); human  
**tissue-specific** housekeeping genes identified by expression profiling)

IT Proteins  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (acrosomal **vesicle** protein 1, gene ACRV1; human  
**tissue-specific** housekeeping genes identified by expression profiling)

IT Transcription factors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (gene SCL, TAL1 (**T-cell** acute lymphocytic leukemia  
 1); human **tissue-specific** housekeeping genes identified by expression  
 profiling)

L8 ANSWER 8 OF 12 MEDLINE on STN

DUPLICATE 3

TI Interactions of histone H1 with **phospholipids** and comparison of  
 its binding to giant liposomes and human leukemic **T**  
**cells**.

AB Due to its net positive charge histone H1 readily associates with  
 liposomes containing acidic **phospholipids**, such as  
 phosphatidylserine (PS). Interestingly, circular dichroism reveals that  
 while histone H1 in aqueous solutions appears as a random coil, . . .  
 with a pronounced increase in alpha-helicity and beta-sheet content,  
 estimated at 7% and 24%, respectively. This interaction further results  
 in **vesicle** aggregation and lipid mixing. Fluorescence  
 microscopy revealed rapid binding of Texas Red-labeled H1 (TR-H1) to giant  
 liposomes composed of phosphatidylcholine. . . presence of the  
 negatively charged PS. Comparison of the behavior of H1 in giant  
 liposomes to that in cultured leukemic **T cells**  
 demonstrated very similar patterns. More specifically, fluorescence  
 microscopy revealed binding of TR-H1 to the plasma membrane as lateral  
 segregated microdomains, . . . into the cell. H1 also triggered  
 membrane blebbing and fragmentation of the nuclei of these cells, thus

suggesting induction of **apoptosis**. Our findings indicate that histone H1 and acidic **phospholipids** form supramolecular aggregates in the plasma membrane of **T cells**, subsequently resulting in major rearrangements of cellular membranes. Our results allow us to conclude that the minimal requirement for the. . .

CT Check Tags: Comparative Study

Animals

Brain Chemistry

Cattle

Histones: CH, chemistry

\*Histones: ME, metabolism

Humans

Jurkat Cells

\*Leukemia, T-Cell: ME, metabolism

Light

\*Liposomes: ME, metabolism

Membrane Fusion

Microscopy, Interference

Microscopy, Phase-Contrast

Phosphatidylcholines: ME, metabolism

Phosphatidylserines: ME, metabolism

\***Phospholipids**: ME, metabolism

Protein Binding

Protein Structure, Secondary

Research Support, Non-U.S. Gov't

Scattering, Radiation

CN 0 (Histones); 0 (Liposomes); 0 (Phosphatidylcholines); 0 (Phosphatidylserines); 0 (**Phospholipids**)

L8 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2005 ACS on STN

AB . . . it was present both in raft and non-raft plasma membrane sub-domains of type II cells. After stimulation, CD95 located in **phospholipid**-rich plasma membrane was recruited to lipid rafts in both types of cells. Similarly, CD95 crosslinking resulted in caspase-independent translocation of. . . Finally, electron microscopy anal. showed that after CD95 stimulation lipid rafts aggregated in large clusters that were internalized in endosomal **vesicles**, where caspase-8 underwent massive processing. Taken together, the authors' data demonstrate that CD95 death-inducing signaling complex formation and internalization in. . .

ST CD95 antigen **apoptosis** signaling internalization lipid raft Th1 Th2

IT **Apoptosis**

Endosome

Human

(CD95 death-inducing signaling complex formation and internalization occur in lipid rafts of type I and type II cells)

IT **T cell** (lymphocyte)

(helper cell/inducer, TH1; CD95 death-inducing signaling complex formation and internalization occur in lipid rafts of type I and type II cells)

IT **T cell** (lymphocyte)

(helper cell/inducer, TH2; CD95 death-inducing signaling complex formation and internalization occur in lipid rafts of type I and type II cells)

L8 ANSWER 10 OF 12 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

AB. . . membranes influence infection. The role of specific lipids within the viral envelope is not well understood. An early hallmark for **apoptosis** is loss of membrane **phospholipid** asymmetry and exposure of phosphatidylserine (PS) on apoptotic cell surfaces. PS is a recognition signal for macrophages to remove dying cells. Macrophages also require PS on the outer leaflet to efficiently phagocytose apoptotic cells. Since **apoptosis** significantly contributes to the progression of AIDS, HIV infected **T cells** or macrophages would be expected to have elevated levels of surface PS. Furthermore, virus particles produced by these cells would. . . annexin

V to enrich for virus particles and to specifically block HIV infection and replication in primary macrophages but not **T cells**. We also significantly inhibited HIV replication with **vesicles** consisting of PS but not phosphatidylcholine. PS appears to be specifically required for HIV infection since viruses pseudotyped with other envelopes are not inhibited by PS-**vesicles** or annexin V. These data indicate that PS is an important cofactor for HIV infection of macrophages.

IT

viral disease, human immunodeficiency virus infection  
HIV Infections (MeSH)

IT

Chemicals & Biochemicals  
annexin V; chemokine receptors; host cell CD4; membrane  
**phospholipid**: asymmetry; phosphatidylcholine;  
phosphatidylserine; viral gpl60

L8

ANSWER 11 OF 12 MEDLINE on STN DUPLICATE 4

TI

. . . apoptotic and necrotic cells is detected by monoclonal antibody binding and mimicked by association of the native antigen with synthetic **phospholipid vesicles**.

AB

By flow cytometry, a conformational change in mouse cytochrome c (cyt c) of apoptotic and necrotic **T** hybridoma **cells** was detected using a monoclonal antibody (mAb) that recognizes the region around amino acid residue 44 on a non-native form of the protein. The conformational change in cyt c is an early event in **apoptosis**, which can be identified in pre-apoptotic cells that are negative for other indicators of **apoptosis**. Since the mAb did not bind fixed and permeabilized live cells and did not immunoprecipitate soluble cyt c extracted with. . . Coincidentally, the mAb was also shown by competitive enzyme-linked immunosorbent assay to bind cyt c associated with synthetic phosphatidic acid **vesicles**. This suggests that the conformational change of cyt c in dying cells could be due to its association with intracellular membranes that are, perhaps, altered in cell death. By immunofluorescent confocal microscopy, conformationally altered cyt c in post-apoptotic **T** hybridoma **cells** showed a punctate distribution, indicating that it remained associated with mitochondria. Furthermore, the heavy membrane fraction of post-apoptotic cells but. . . cells was functional in caspase activation. This suggests that membrane-bound cyt c is the relevant caspase coactivation factor in the **T** hybridoma **cells**.

CT

Animals  
Antibodies, Monoclonal: IM, immunology  
Antigens, Surface: IM, immunology  
\***Apoptosis**  
Caspases: ME, metabolism  
Cell Membrane: ME, metabolism  
Cells, Cultured  
\*Cytochrome c Group: CH, chemistry  
Cytochrome c Group: IM, immunology  
Enzyme Activation  
Flow Cytometry  
\*Fluorescein-5-isothiocyanate: AA, analogs & derivatives  
Hybridomas  
Mice  
Molecular Mimicry  
\*Necrosis  
Peptides: IM, immunology  
**Phospholipids**: IM, immunology  
Precipitin Tests  
Protein Conformation  
Research Support, U.S. Gov't, Non-P.H.S.

CN

0 (Antibodies, Monoclonal); 0 (Antigens, Surface); 0 (Cytochrome c Group);  
0 (Peptides); 0 (**Phospholipids**); EC 3.4.22.- (Caspases)

L8

ANSWER 12 OF 12 MEDLINE on STN DUPLICATE 5

AB

CD95 (Fas, APO-1)-induced programmed cell death (**apoptosis**) in **T cell** lines is accompanied by a rapid flip-flop of phosphatidylserine (PtdSer). Externalization of this **phospholipid**

has been previously recognized as one of the early detectable events of cells undergoing **apoptosis**. We show here that CD95 induces a rapid (detectable at time < 15 min), strong (2.5-fold) but transitory neosynthesis of. . . process, was strongly inhibited by CD95 suggesting that changes in mitochondrial activity take place in the early events of Fas-induced **apoptosis** and participate in the increased PtdSer synthesis observed. In cells undergoing **apoptosis**, newly synthesized PtdSer first exposed at the cell surface was in part shed with CD95-induced plasma membrane **vesicles**, a process that likely explains the transitory effect observed.

CT Antibodies, Monoclonal  
Antigens, CD95: ME, metabolism  
\*Antigens, CD95: PD, pharmacology  
    **Apoptosis: DE, drug effects**  
    **\*Apoptosis: PH, physiology**  
Biological Transport  
Calcium: ME, metabolism  
Decarboxylation: DE, drug effects  
Humans  
Jurkat Cells  
Membrane Potentials  
Phosphatidylserines: AG, agonists  
\*Phosphatidylserines:. . .

=> d his

(FILE 'HOME' ENTERED AT 15:27:07 ON 19 APR 2005)

FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 15:27:29 ON 19 APR 2005

L1	266262 S PHOSPHOLIPID
L2	247632 S VESICLE
L3	558389 S T(1W) CELL
L4	300354 S APOPTOSIS
L5	27527 S L1 AND L2
L6	29240 S L3 AND L4
L7	21 S L5 (L) L6
L8	12 DUP REM L7 (9 DUPLICATES REMOVED) E FRANCOIS CEDRIC /AU
L9	4 S E3
L10	4 DUP REM L9 (0 DUPLICATES REMOVED)

=> e francois cedric /au

E1 12 FRANCOIS CATHERINE/AU  
E2 4 FRANCOIS CECILE/AU  
E3 4 --> FRANCOIS CEDRIC/AU  
E4 11 FRANCOIS CEDRIC G/AU  
E5 4 FRANCOIS CELINE/AU  
E6 2 FRANCOIS CESARE/AU  
E7 52 FRANCOIS CHANTAL/AU  
E8 5 FRANCOIS CHARLES/AU  
E9 1 FRANCOIS CHARLES ANDRE/AU  
E10 3 FRANCOIS CHRISTIAN/AU  
E11 25 FRANCOIS CHRISTINE/AU  
E12 3 FRANCOIS CHRISTOPHE/AU

=> s e3

L9 4 "FRANCOIS CEDRIC"/AU

=> dup rem l9

PROCESSING COMPLETED FOR L9

L10 4 DUP REM L9 (0 DUPLICATES REMOVED)

=> d l10

L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2005:182810 CAPLUS

DN 142:278750

TI Antibodies conjugated with phagocytic marker for enhancing phagocytosis  
against autoimmune disease, infection, cancer and others

IN **Francois, Cedric**; Olson, Paul; Deschatelets, Pascal; Machiels,  
Alec

PA Potentia Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 173 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005019429	A2	20050303	WO 2004-US27245	20040823
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2003-497086P	P	20030822		
	US 2003-514941P	P	20031028		
	US 2003-523611P	P	20031119		
	US 2003-524126P	P	20031121		
	US 2003-524730P	P	20031124		
	US 2004-547951P	P	20040226		

=> d l10 2-4

L10 ANSWER 2 OF 4 MEDLINE on STN

AN 2005064012 IN-PROCESS

DN PubMed ID: 15692359

TI Bone quality and healing in a swine vascularized bone allotransplantation  
model using cyclosporine-based immunosuppression therapy.

AU Vossen Marieke; Edelstein Jean; Majzoub Ramsey K; Maldonado Claudio;  
Perez-Abadia Gustavo; Voor Michael J; Orhun Haldun; Tecimer Taskin;  
**Francois Cedric**; Kon Moshe; Barker John H

CS Department of Surgery, University of Louisville, Louisville, Ky, USA.  
 SO Plastic and reconstructive surgery, (2005 Feb) 115 (2) 529-38.  
 Journal code: 1306050. ISSN: 1529-4242.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS NONMEDLINE; IN-PROCESS; NONINDEXED; Abridged Index Medicus Journals;  
 Priority Journals  
 ED Entered STN: 20050205  
 Last Updated on STN: 20050210

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2004:493663 CAPLUS  
 DN 141:59648  
 TI Methods of treating transplants with engineered T-cell-apoptosis-inducing  
 fusogenic vesicles to prevent immunorejection  
 IN **Francois, Cedric**  
 PA University of Louisville Research Foundation, USA  
 SO PCT Int. Appl., 99 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004049907	A2	20040617	WO 2003-US37915	20031128
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				
	PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,				
	TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,				
	BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,				
	ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,				
	TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004213766	A1	20041028	US 2003-724527	20031128
PRAI	US 2002-429435P	P	20021127		
OS	MARPAT 141:59648				

L10 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
 AN 2002:247065 BIOSIS  
 DN PREV200200247065  
 TI Phytoplankton production, exudation and bacterial reassimilation in the  
 River Meuse (Belgium).  
 AU Descy, Jean-Pierre [Reprint author]; Leporcq, Bruno; Viroux, Laurent;  
**Francois, Cedric**; Servais, Pierre  
 CS Laboratoire d'Ecologie des Eaux Douces, Urbo, Fundp, 61 Rue de Bruxelles,  
 5000, Namur, Belgium  
 jean-pierre.descy@fundp.ac.be  
 SO Journal of Plankton Research, (March, 2002) Vol. 24, No. 3, pp. 161-166.  
 print.  
 CODEN: JPLRD9. ISSN: 0142-7873.  
 DT Article  
 LA English  
 ED Entered STN: 17 Apr 2002  
 Last Updated on STN: 17 Apr 2002

=> d his

(FILE 'HOME' ENTERED AT 15:18:30 ON 19 APR 2005)

FILE 'MEDLINE, CAPLUS, BIOSIS' ENTERED AT 15:18:55 ON 19 APR 2005

L1	266262 S PHOSPHOLIPID
L2	247632 S VESICLE
L3	558389 S T WITH CELL
L4	558389 S T (1W) CELL
L5	300354 S APOPTOSIS
L6	24668 S L1 (L) L2
L7	24040 S L4 (L) L5
L8	8 S L6 (L) L7
L9	4 DUP REM L8 (4 DUPLICATES REMOVED)

=> s phospholipid  
L1 266262 PHOSPHOLIPID

=> s vesicle  
L2 247632 VESICLE

=> s t with cell  
L3 558389 T WITH CELL

=> s t (1w) cell  
L4 558389 T (1W) CELL

=> s apoptosis  
L5 300354 APOPTOSIS

=> s l1 (1) l2  
L6 24668 L1 (L) L2

=> s l4 (1) l5  
L7 24040 L4 (L) L5

=> s l6 (1) l7  
L8 8 L6 (L) L7

=> dup rem l8  
PROCESSING COMPLETED FOR L8  
L9 4 DUP REM L8 (4 DUPLICATES REMOVED)

=> d l9 1-4 ti py au so

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN  
TI Methods of treating transplants with engineered T-cell-apoptosis-inducing  
fusogenic vesicles to prevent immunorejection  
PY 2004  
2004  
IN Francois, Cedric  
SO PCT Int. Appl., 99 pp.  
CODEN: PIXXD2

L9 ANSWER 2 OF 4 MEDLINE on STN DUPLICATE 1  
TI Interactions of histone H1 with phospholipids and comparison of its  
binding to giant liposomes and human leukemic T cells.  
PY 2004  
AU Zhao Hongxia; Bose Shambhunath; Tuominen Esa K J; Kinnunen Paavo K J  
SO Biochemistry, (2004 Aug 10) 43 (31) 10192-202.  
Journal code: 0370623. ISSN: 0006-2960.

L9 ANSWER 3 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN  
TI Phosphatidylserine on human immunodeficiency virus (HIV) envelope is a  
cofactor for infection of macrophages.  
PY 2001  
AU Henderson, Andrew James [Reprint author]; Callahan, Mellisa K. [Reprint  
author]; Truong, Linh T. [Reprint author]; Schlegel, Robert A. [Reprint  
author]  
SO FASEB Journal, (March 8, 2001) Vol. 15, No. 5, pp. A1010. print.  
Meeting Info.: Annual Meeting of the Federation of American Societies for  
Experimental Biology on Experimental Biology 2001. Orlando, Florida, USA.  
March 31-April 04, 2001.  
CODEN: FAJOEC. ISSN: 0892-6638.

L9 ANSWER 4 OF 4 MEDLINE on STN DUPLICATE 2  
TI CD95 (Fas/APO-1) induces an increased phosphatidylserine synthesis that  
precedes its externalization during programmed cell death.  
PY 1998  
AU Aussel C; Pelassy C; Breittmayer J P  
SO FEBS letters, (1998 Jul 17) 431 (2) 195-9.  
Journal code: 0155157. ISSN: 0014-5793.

=> d 19 ti au py so kwic

L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

TI Methods of treating transplants with engineered T-cell-apoptosis-inducing fusogenic vesicles to prevent immunorejection

IN Francois, Cedric

PY 2004

2004

SO PCT Int. Appl., 99 pp.

CODEN: PIXXD2

AB The invention provides methods protecting transplants from immunorejection by administering to the transplant a **T cell-apoptosis**-inducing mol. and a **phospholipid** which is a stable **vesicle** former. Without harming or pre-treating the recipient, the endothelium of an allograft are coated with a protective veil consisting of selected exogenous mols. Engineered highly fusogenic **vesicles** (FUVs) quickly incorporate into cell membranes, the lipids of which are modified to include specific mols. that act as tethers. . . the extracellular domains of single-pass transmembrane polypeptides to the lipids of cell membranes, prevents the rapid internalization of the polypeptides. **T-cell-apoptosis**-inducing mol., such as FasL, are tethered to the endothelial membranes of the transplant, lying in wait for the unwary **T cell**. FasL specifically binds Fas receptors on **T cells**, triggering the death of the cell before the cell has the opportunity to damage the transplant. The invention allows for. . .

ST transplant pretreatment engineered **T cell apoptosis** inducing fusogenic **vesicle**; immunorejection transplant prevention FasL fusion protein fusogenic **vesicle** treatment; **phospholipid** polar lipid FUV **T cell apoptosis** induction transplant

IT Drug delivery systems  
(biotinylated **phospholipid**; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT **Phospholipids**, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stable **vesicle** former, FUV comprising; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)

IT 4235-95-4 59403-54-2, 1-Palmitoyl-2-docosahexaenoyl-sn-glycero-3-phosphocholine  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(as stable **vesicle** former **phospholipid**; methods of treating transplants with engineered **T-cell-apoptosis**-inducing fusogenic **vesicles** (FUVs) to prevent immunorejection)